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10/562,920

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EXAMINER

KOSANOVIC, HELENA

ART UNIT

PAPER NUMBER

3749

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                    |  |
|------------------------------|--------------------------------------|------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/562,920 | <b>Applicant(s)</b><br>KIEL ET AL. |  |
|                              | <b>Examiner</b><br>HELENA KOSANOVIC  | <b>Art Unit</b><br>3749            |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/29/08</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the control flap in a distribution space (claim 1) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Also in claim 1, a vehicle window and a defrosting nozzle must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

In claim 5, a gear mechanism must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not clear how the control flaps can divide the air stream in the distributor space, when it is not shown that the distributor space has any control flaps.
2. Claim 1 recites the limitation "the defrosting passage" in line 18. There is insufficient antecedent basis for this limitation in the claim.
3. Regarding claim 1, the phrase "such as", l. 19, renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 6-8 and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by .

Gilles teaches the invention as claimed:

Regarding claim 1, an air conditioning device for a vehicle having a fan ( see abstract) an evaporator (as necessarily present element in order to have the cold conditioned air as stated in Abstract); a distribution space 18, 20 (fig. 1) and in which the air stream can be divided by means of control flaps 56, 68, between a first flow passage 18, and a second flow passage 20, so that it is possible to generate a first partial air stream 18, and a second partial air stream 20,

- the first flow passage opening out into a mixing chamber 46,
- while a heat exchanger 34, for heating the second partial air stream is arranged in the second flow passage and the second flow passage opens out in the mixing chamber downstream of the heat exchanger (fig. 1),
- it being possible to generate a mixed air stream from the first and second partial air streams in the mixing chamber, air exit passages leading from the mixing chamber into different regions of the vehicle interior, with switching flaps 76, 66 (fig. 1), which control the air exit stream from the mixing chamber through the associated air exit passage,

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being assigned to the air exit passages on the mixing chamber side,

- at least one of the air exit passages being the defrosting passage, 40, 42 which is used to generate an air stream directly on the inner side of a vehicle window (Abstract), such as in particular the front windshield, of the vehicle and opens out at a defrosting nozzle 42 assigned to the vehicle window,
- in which there is arranged at least one bypass passage 70, 68 (fig. 1 and Abstract), which branches off downstream of the heat exchanger, starting from the second flow passage upstream of the mixing chamber, opens out directly into the defrosting passage and through which a warm air stream can flow, wherein each bypass passage is assigned a mixing flap 74 for controlling the warm air stream through the bypass passage.

Regarding claim 2, the position of the mixing flap is coupled to the position of the control flaps which divide the air stream into the first and second partial air streams (fig. 1).

Regarding claim 3, wherein the mixing flap and control flaps are arranged on a common pivot axle 54 (fig. 1).

Regarding claim 6, the first flow passage is designed as an overflow passage with respect to the second flow passage, within the course of which the control flaps are arranged, it being possible to define the ratio between the first partial air stream and the second partial air stream by means of the control flaps arranged in the region of the beginning of the first and second flow passages (fig. 1)

The examiner notice that to the extent that the applicant's invention has the first flow

passage as a overflow passage, the prior art invention has too, since the same structure provide the same results.

Regarding claim 7, each bypass passage runs in such a way that it passes through the first flow passage, the first flow passage having the bypass passage passing through it in particular in the region of the control flaps (fig. 1).

Regarding claim 8, the mixing flap and control flap are arranged on a common pivot axle 54, with the mixing flap extending within regions in which the bypass passage runs, while the control flap is formed in the other regions (fig. 2).

Claims 13-15 are rejected because the Gilles apparatus (is considered to be formed by the method steps, as claimed.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilles FR 2737156.

Regarding claims 9-12, Gilles teaches that the, flaps extend in the axial direction of the common pivot axle and are mounted on the pivot axle by means of pivot arms (orthogonal on element 74, fig. 2) but are not curved. However, at the time the invention was made it would have been obvious mater of design choice to a person of

ordinary skill in the art to have curved flaps (concave or convex) instead of straight , because applicant has not disclosed that the curved flaps provides an advantage is used for particular purpose or solves a stated problem. One of ordinary skill in the art would have expected the Applicant's invention to perform equally well with curved or not curved shape, because both shapes performs the function of transferring the air equally well (MPEP 2144.04 IV B).

5. Claims 4-5 rejected under 35 U.S.C. 103(a) as being unpatentable over Gilles FR 2737156 in view of Tsurushima 6,684,137.

Gilles teaches the invention as claimed, but is not specific about common actuator and gear mechanism.

Andersen teaches two flaps 10, 20 driven by means of a common actuator

Tsurushima teaches regarding claim 4, the mixing flap 11b and control flaps 11Q (fig. 5) are driven by means of a common actuator 32 (fig. 4, col6.II. 35-42).

Regarding claim 5, wherein the mixing flap and control flaps are driven by means of a common actuator 32, with a gear mechanism 31j, 31d (fig. 4) being arranged between the mixing flap and control flaps, in such a manner that the angular movement of the• mixing flap is in a fixed ratio to the angular movement of the control flaps.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have the Gilles invention modified with the Tsurushima common actuator and gear mechanism between the mixing flaps and the control flaps in order to have simple construction and thus less expensive device (col. 6, II. 52-55).



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELENA KOSANOVIC whose telephone number is (571)272-9059. The examiner can normally be reached on 8:30-5:00, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on 571-272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. K./  
Examiner, Art Unit 3749

/Steven B. McAllister/  
Supervisory Patent Examiner, Art Unit 3749

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